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United States
Department of
Agriculture

Soil
Conservation
Service



Idaho

Basin Outlook Report

June 1, 1993



Basin Outlook Reports

and Federal - State - Private Cooperative Snow Surveys

For more water supply and resource management information, contact:

Your local Soil Conservation Service Office

or

Soil Conservation Service

Snow Surveys

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How forecasts are made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Soil Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated SNOTEL measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via meteor burst telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

Forecast uncertainty originates from two sources: (1) uncertainty of future hydrologic and climatic conditions, and (2) error in the forecasting procedure. To express the uncertainty in the most probable forecast, four additional forecasts are provided. The actual streamflow can be expected to exceed the most probable forecast 50% of the time. Similarly, the actual streamflow volume can be expected to exceed the 90% forecast volume 90% of the time. The same is true for the 70%, 30%, and 10% forecasts. Generally, the 90% and 70% forecasts reflect drier than normal hydrologic and climatic conditions; the 30% and 10% forecasts reflect wetter than normal conditions. As the forecast season progresses, a greater portion of the future hydrologic and climatic uncertainty will become known and the additional forecasts will move closer to the most probable forecast.

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IDAHO WATER SUPPLY OUTLOOK REPORT

JUNE 1, 1993

SUMMARY

After six consecutive dry years, water year 1993 will be remembered as the year that filled most of Idaho's nearly empty reservoirs. After a delayed snowmelt in April, the skies cleared in May and jump-started the melting of the snowpack. Rapid melting brought the above average May 1 snowpack to below normal levels for June 1 and produced rapid rises in streams across the state. Streamflow in May ranged from 100-150% of average for the southern 3/4 of the state. Reservoir storage improved significantly in May with many reservoirs reaching full capacity. Overall, surface water supplies should be excellent for the many diverse Idaho water users this year, but several good snowpack years are needed to recharge depleted groundwater supplies.

SNOWPACK

Cool temperatures and above normal precipitation the first week of May delayed the start of snowpack melt. Above normal temperatures quickly followed and caused rapid melting of the snowpack. This brought an above normal May 1 snowpack to below normal levels by June 1. On the warmest days melt rates exceeded 2.0 inches per day throughout the state. Remaining snowpacks vary with the proportion of high elevation areas in the basin and are about three-quarters of normal in the central mountains, near normal in the Henrys Fork, Teton, and Bear River basins. Snowpacks are only about half of normal in the Salmon basin and about a third of normal in the Clearwater and Panhandle areas.

PRECIPITATION

Precipitation in May started the way April ended, wet and cool. Many stations in central and northern Idaho received most of their May precipitation during the first ten days of the month. Precipitation across the northern two-thirds of the state was 70-90% of average, 60% of average in the Wood and Lost basins, 117% of average across the southern border, and near 150% of average in eastern Idaho and the Bear River basin. Precipitation for the water year ranges from 82% of average in the Panhandle and Clearwater areas to 118% of average in the Southside Snake River basins. Temperatures were above normal in May with Orofino reaching 104 degrees and Boise reporting 5.6 degrees above normal for the month.

RESERVOIRS

Reservoir storage improved greatly during May as a result of above normal runoff throughout most of the state. Reservoirs reporting full or near full levels include Dworshak, Cascade, Mann Creek, Owyhee, Brownlee, Lucky Peak, Arrowrock, Magic, Little Wood, Mackay, Island Park, Grassy Lake, Palisades, American Falls, and Montpelier. A few reservoirs are still reporting between 30-50% of usable capacity, including Blackfoot, Oakley, Salmon Falls, and Bear Lake. Conservation in these areas will help to improve carryover storage for next year. Northern Idaho lakes including Coeur d'Alene, Priest, and Pend Oreille are full or nearly full, but some reservoirs in Montana on the Clarks Fork drainage are only about 50% of capacity.

Note: SCS reports reservoir information in terms of usable volumes, which includes both active and inactive storage and in some cases dead storage. Other operators may report reservoir contents in different terms.

STREAMFLOW

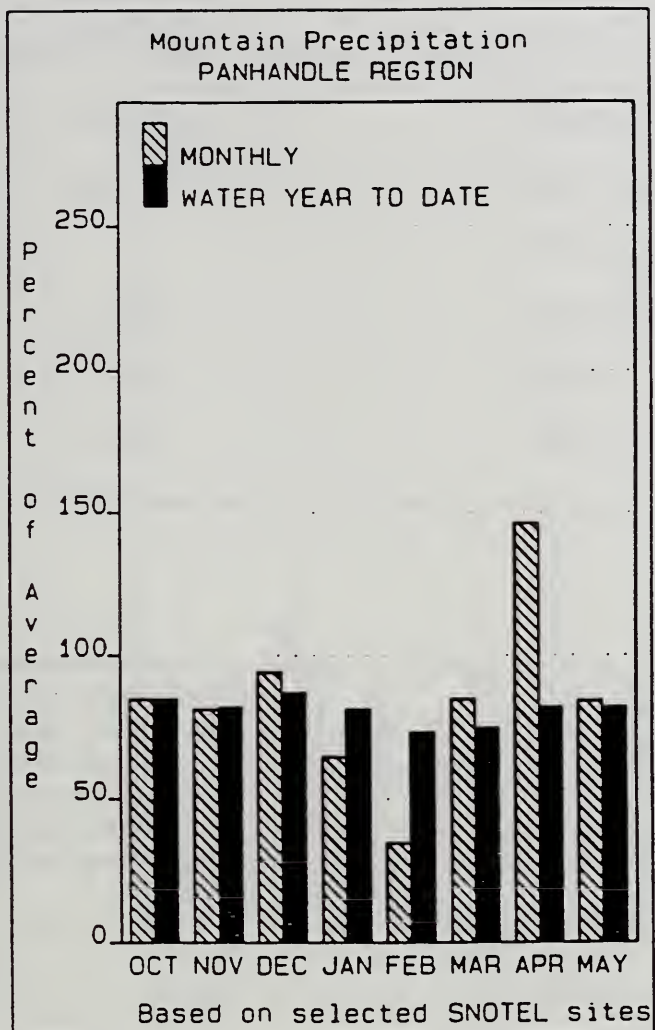
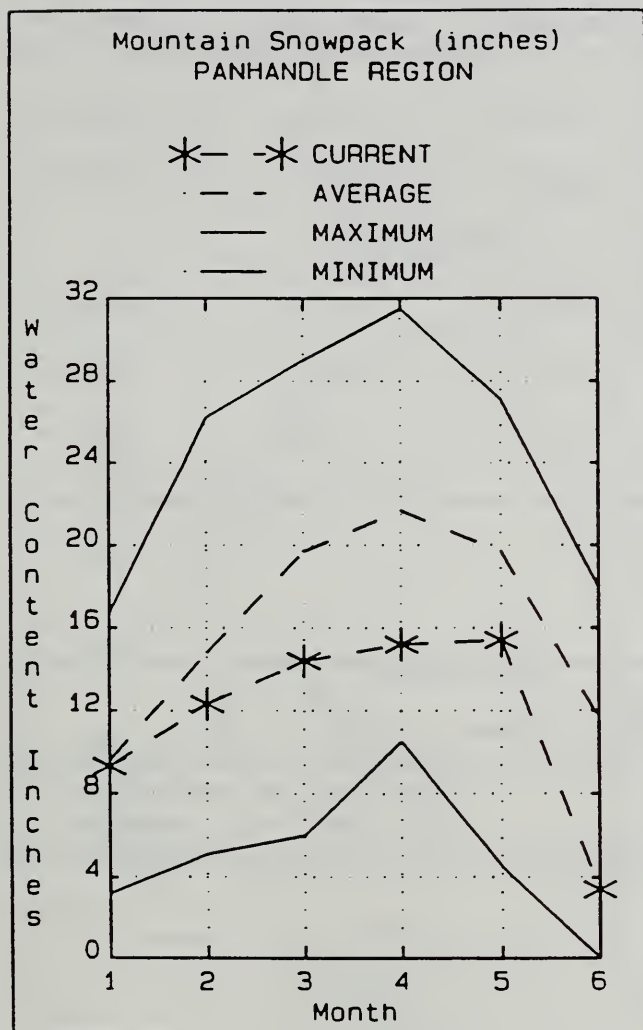
Rapid warming during mid May caused sudden and very high flows on most rivers around the state. As a result, some reservoirs filled and spilled, a sight not seen in seven or eight years. Streamflow volumes during May were well above normal in most areas except northern Idaho where average amounts were recorded. Although streamflow forecasts are not issued in Idaho this month, the high elevation snowpack in central and eastern Idaho should be sufficient to maintain adequate streamflows through June and early July. Northern Idaho snowpacks are almost depleted and streamflows will begin dropping rapidly in June unless abundant precipitation occurs this month.

RECREATION OUTLOOK

With many reservoirs full and streams running bankfull water users around the state will have a very good and long season this year. Streams in northern Idaho will be dropping to below normal levels because of the low snowpack, but the lake levels should be adequate all season. The Salmon River will have adequate flows for boating throughout the summer. River runners and reservoir users in the Payette and Boise basins will have good flows and an extended season due to nearly full reservoirs. Boating conditions in eastern Idaho and Wyoming should remain good all summer because the snowpack is still near normal. Fishing in most of the rivers should improve after the rivers pass their peak flows.

PANHANDLE REGION

JUNE 1, 1993



WATER SUPPLY OUTLOOK

After a very wet April, precipitation in the Panhandle region returned to its previous pattern of below normal moisture. May precipitation was 84% of average with the majority of it falling during the first ten days of the month. Precipitation for the water year (October-May) is 82% of average, a little better than last year's 75% of average. The snowpack is better than last year's near record low snowpack, but is still extremely low for northern Idaho at only 30% of average. Schweitzer Basin SNOTEL site has only 11.9 inches of snow water while the June 1 average is 34.3 inches. As a result of the below normal snowpack, streams are expected to return to baseflow conditions earlier than normal. Streams flowing into the state from Montana are expected to remain below normal and hydropower production in the northwest is also expected to be below normal this season. On the positive side, Coeur d'Alene, Priest, and Pend Oreille lakes are near full and will have adequate water levels for the rest of the season. As a result of the consecutive dry years, fire danger is expected to be high in northern Idaho and western Montana if dry spells occur this summer.

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PANHANDLE REGION
Reservoir Storage (1000AF) End of May, 1993

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Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
HUNGRY HORSE	3451.0	1695.0	2647.0	2659.0
FLATHEAD LAKE	1791.0	1605.0	1581.0	1480.0
NOXON RAPIDS		NO REPORT		
PEND OREILLE	1561.3	1408.0	1091.9	1278.5
COEUR D'ALENE	238.5	227.5	283.2	280.5
PRIEST LAKE	119.3	125.0	94.0	138.7

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PANHANDLE REGION
Watershed Snowpack Analysis - June 1, 1993

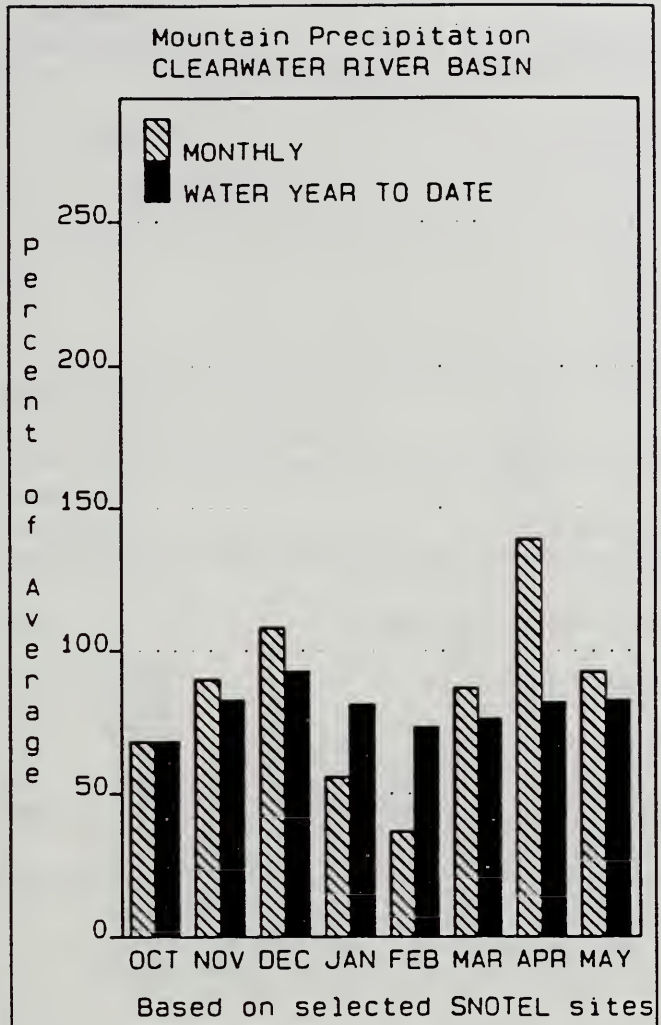
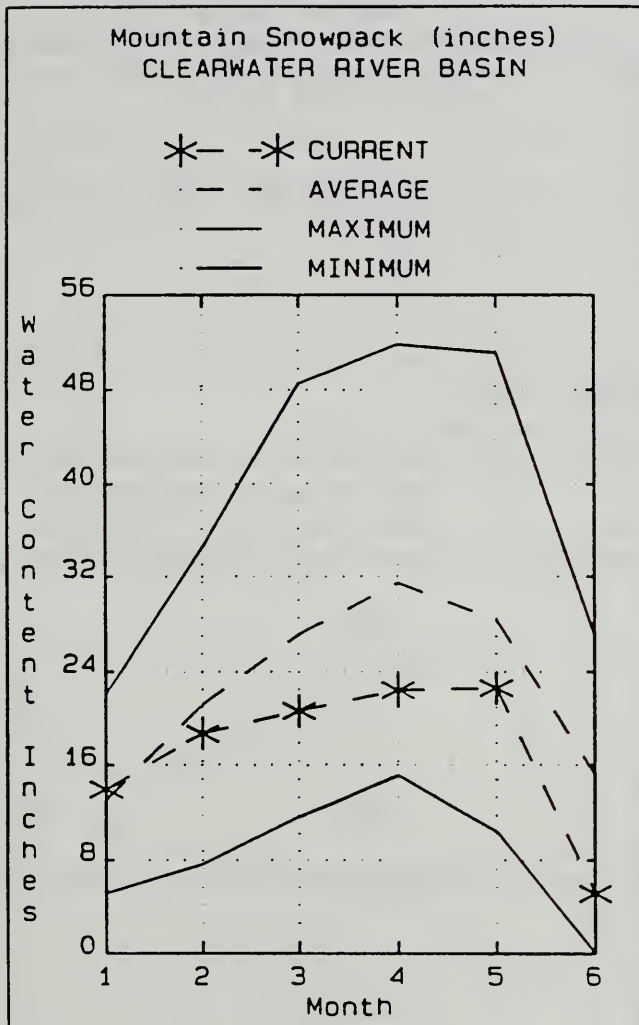
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Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
Kootenai ab Bonners Ferry	13	107	30
Moyie River	1	0	0
Clark Fork River	29	247	26
Priest River	2	0	24
Pend Oreille River	42	234	36
Rathdrum Creek	1	0	0
Hayden Lake	0	0	0
Coeur d'Alene River	4	0	10
St. Joe River	2	292	53
Spokane River	7	349	32
Palouse River	1	0	0

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CLEARWATER RIVER BASIN

JUNE 1, 1993



WATER SUPPLY OUTLOOK

May precipitation was 93% of average and stands at 83% for the water year. Last year at this time the water year to date precipitation was only 79% of average and the snowpack was nearly all melted. The snowpack is currently about 1/3 of the June 1 average. With air temperatures in Orofino at 100 and 104 degrees on May 11 and 12, respectively, the Lochsa, Selway, and Clearwater rivers rose quickly and reached their peaks on May 15. The Selway peaked at about 28,000 cfs, Lochsa at 18,500 cfs, and Clearwater at Orofino at 59,000 cfs. Streamflow volumes during May ranged from 103% of average for Dworshak inflow to 125% for the Clearwater at Orofino. Dworshak Reservoir is full and at 115% of average. The residual streamflows will be below normal unless an extended wet spell occurs.

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CLEARWATER RIVER BASIN
Reservoir Storage (1000AF) End of May, 1993

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Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
DWORSHAK	3467.8	3437.2	3306.0	2987.3

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CLEARWATER RIVER BASIN
Watershed Snowpack Analysis - June 1, 1993

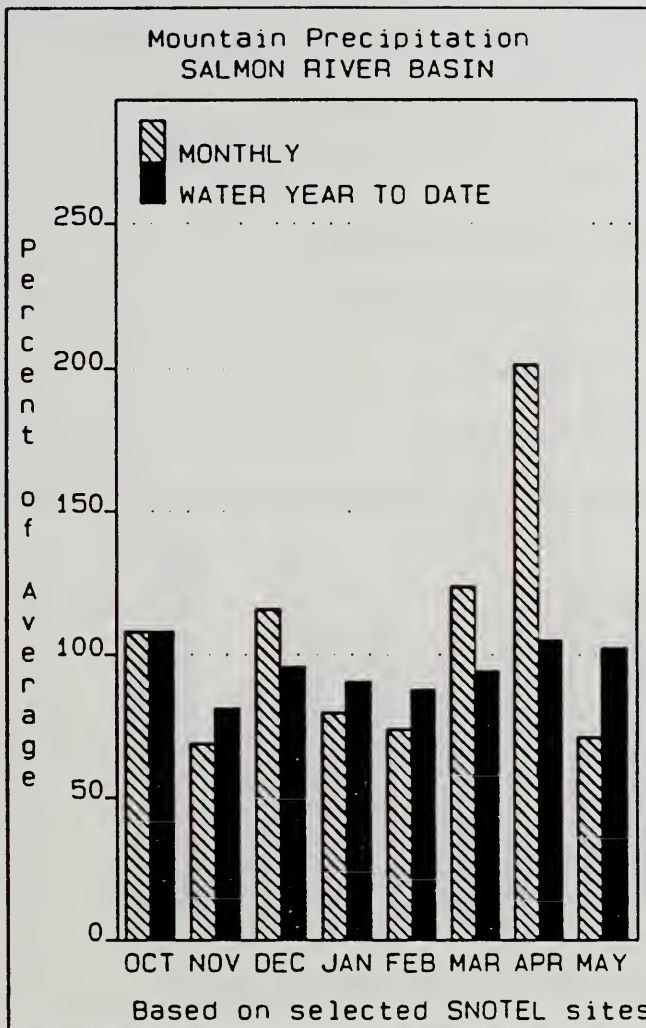
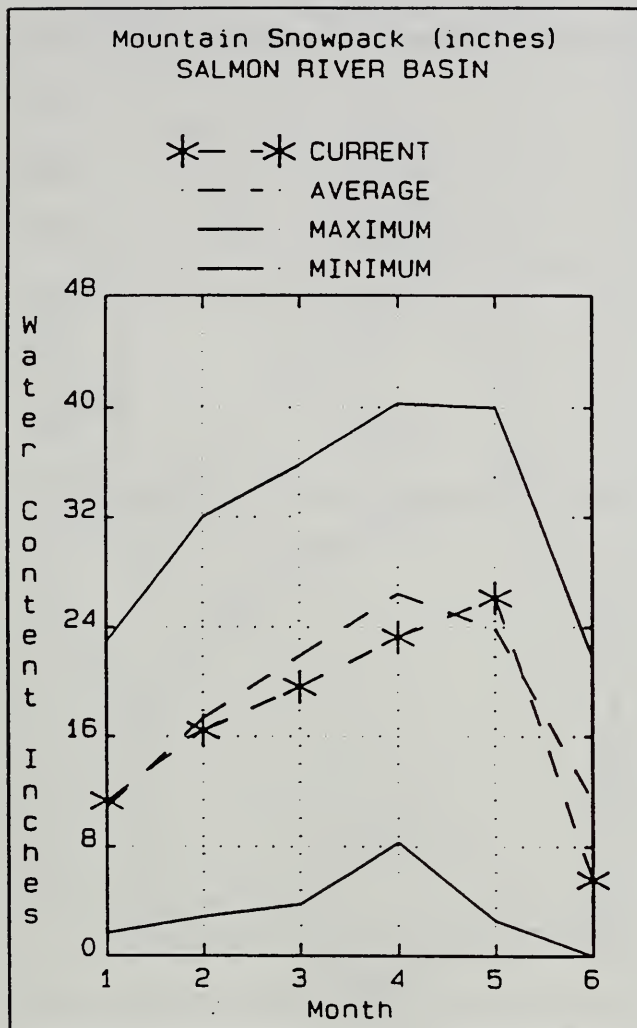
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Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
North Fork Clearwater	10	180	40
Lochsa River	2	0	0
Selway River	4	0	15
Clearwater Basin Total	15	195	34

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SALMON RIVER BASIN

JUNE 1, 1993



WATER SUPPLY OUTLOOK

After receiving above normal precipitation in March and April, May precipitation was 71% of average with most of it falling during the first 10 days of the month. Precipitation for the water year is near normal, much better than the 72% of average reported last year. Above normal temperatures in mid-May caused rapid melting of the snowpack which now ranges from 50-80% of average across the basin. The Salmon River stations at Salmon and White Bird reached their seasonal peak flow around May 22, at 8,750 cfs and 64,200 cfs respectively. The May streamflow volumes were around 125% of average. River runners and other water users can expect one of the best seasons in recent years.

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SALMON RIVER BASIN
Watershed Snowpack Analysis - June 1, 1993

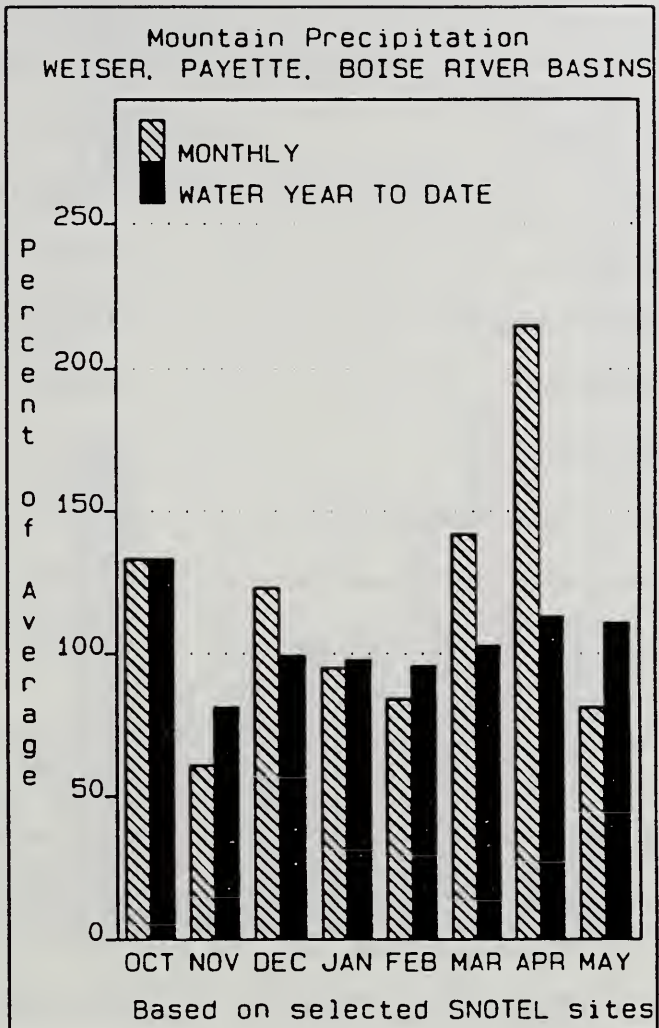
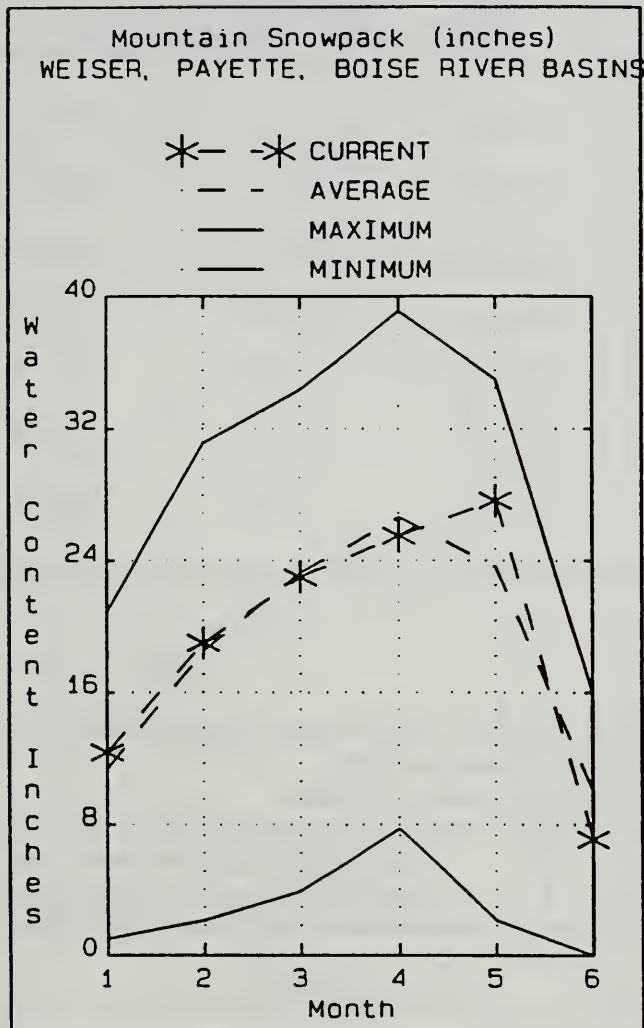
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Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
Salmon River ab Salmon	7	0	61
Lemhi River	4	218	46
Middle Fork Salmon River	3	0	80
South Fork Salmon River	3	0	73
Little Salmon River	4	0	0
Salmon Basin Total	22	1267	51

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WEISER, PAYETTE, BOISE RIVER BASINS

JUNE 1, 1993



WATER SUPPLY OUTLOOK

May began the same way April ended, with most of the precipitation falling during the first 10 days of the month. Precipitation in May was 82% of average and is 111% of average for the water year. The remaining snowpack in the higher elevations is below normal for this time of year and ranges from 65-90% of average. Above normal temperatures in May generated a rapid melt of the snow and produced a quick rise in the streams. Most streams in the Boise and Payette basins had dual peaks on the 15th and 21st of May. May streamflow volumes ranged from 130-150% of average. The total flow at the Boise River near Twin Springs during May was 3/4 of the total volume received all of last water year. Combined reservoir storage in the Payette basin is 94% of usable capacity, 118% of average, while the combined storage in the Boise basin is 86% of capacity, 105% of average. Current projections are that Anderson Ranch Reservoir will fill towards the end of June or beginning of July. Irrigators and water users will have an adequate water supply this year, whether using the water in the rivers or reservoirs.

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WEISER, PAYETTE, BOISE RIVER BASINS

Reservoir Storage (1000AF) End of May, 1993

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Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
MANN CREEK	11.1	11.2	6.1	10.8
CASCADE	703.2	670.0	583.9	548.7
DEADWOOD	161.9	140.2	105.8	136.2
ANDERSON RANCH	464.2	358.0	117.3	413.3
ARROWROCK	286.6	277.3	18.5	216.3
LUCKY PEAK	293.2	264.0	271.6	225.9
LAKE LOWELL (DEER FLAT)	177.1	112.6	39.0	159.0

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WEISER, PAYETTE, BOISE RIVER BASINS

Watershed Snowpack Analysis - June 1, 1993

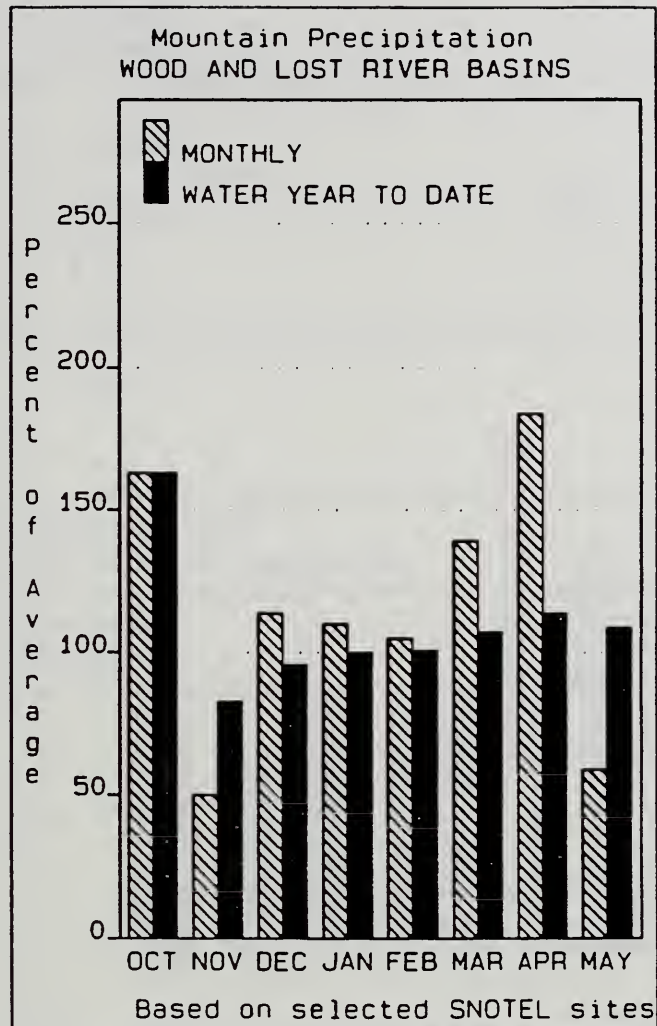
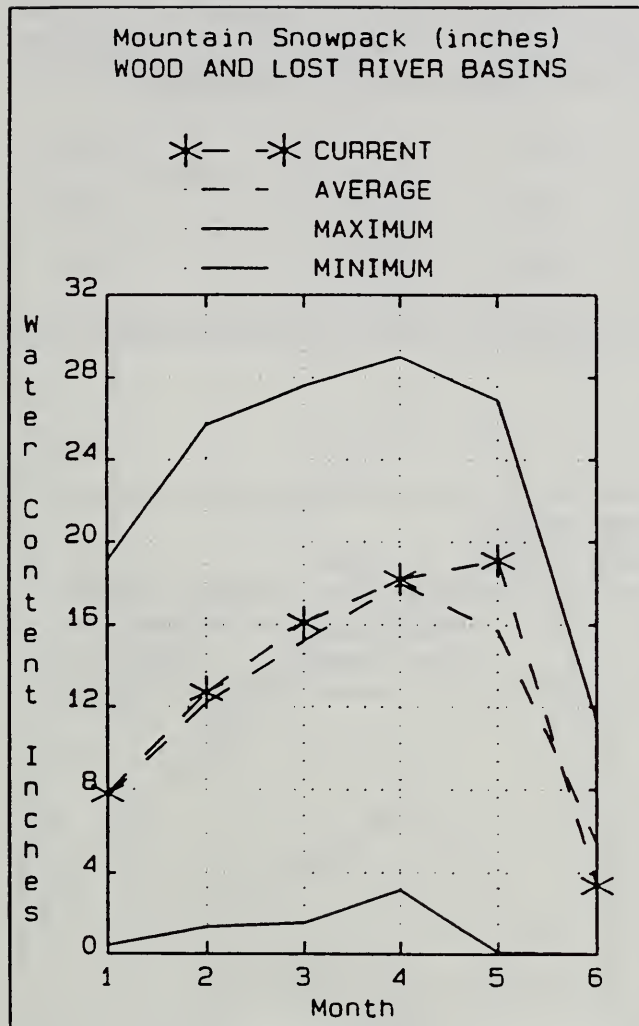
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Watershed	Number of Data Sites	This Year as Percent of Last Year	Percent of Average
Mann Creek	1	0	0
Weiser River	3	0	0
North Fork Payette	7	0	55
South Fork Payette	4	0	81
Payette Basin Total	12	0	65
Middle & North Fork Boise	6	0	77
South Fork Boise River	5	0	86
Mores Creek	2	0	0
Boise Basin Total	9	0	75
Canyon Creek	0	0	0

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WOOD and LOST RIVER BASINS

JUNE 1, 1993



WATER SUPPLY OUTLOOK

After receiving above normal mountain precipitation each month since December, May showers were only 59% of average. Precipitation for the water year is 109% of average. Above normal temperatures in mid-May brought a rapid melt of the snowpack. With many sites melted out, the few higher elevation sites are reporting a snowpack in the 60-70% range. Magic Reservoir filled for the first time since June of 1986; Little Wood and Mackay reservoirs are also full. Water supplies will be adequate for users in the area this year and the full reservoirs will help to improve the carryover storage for next year.

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WOOD AND LOST RIVER BASINS

Reservoir Storage (1000AF) End of May, 1993

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Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
MAGIC	191.5	191.1	6.2	173.8
LITTLE WOOD	30.0	30.2	15.3	28.0
MACKAY	44.4	44.4	15.7	33.6

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WOOD AND LOST RIVER BASINS

Watershed Snowpack Analysis - June 1, 1993

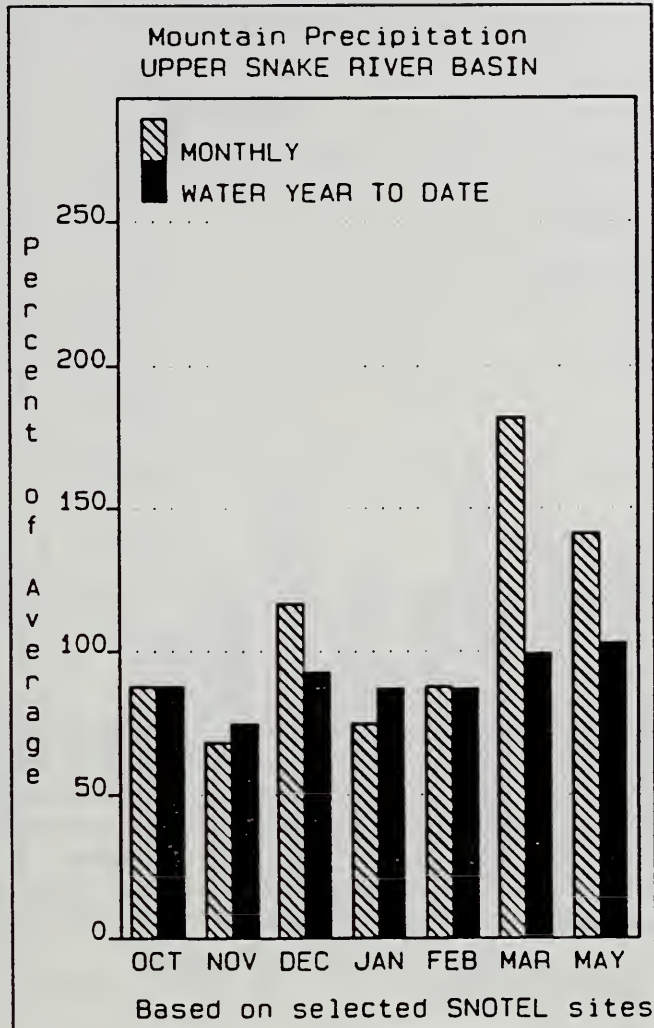
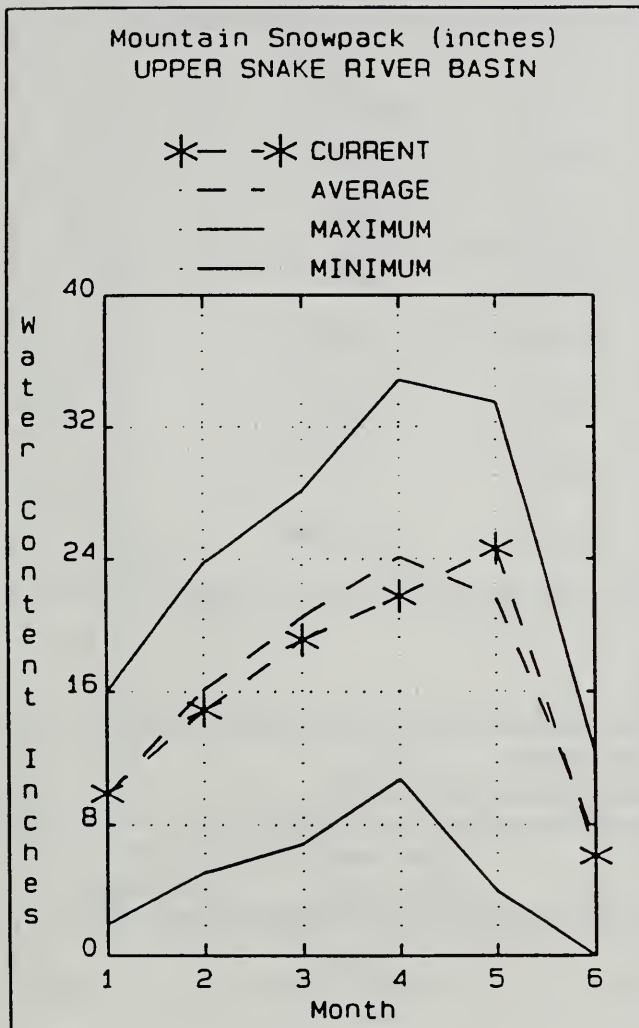
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Watershed	Number of Data Sites	This Year as Percent of Last Year	Percent of Average
Big Wood ab Magic	6	0	68
Camas Creek	1	0	0
Big Wood Basin Total	7	0	68
Little Wood River	2	0	0
Fish Creek	0	0	0
Big Lost River	4	0	70
Little Lost River	3	0	38

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UPPER SNAKE RIVER BASIN

JUNE 1, 1993



WATER SUPPLY OUTLOOK

Cooler temperatures and well above normal May precipitation (141% of average) in eastern Idaho caused a slower melt of the snowpack in the higher elevation areas. Mountain precipitation for the water year is slightly above normal. The snowpack in the lower elevation drainages of Willow, Blackfoot, and Portneuf has melted, while Henrys Fork, Teton, and Snake above Palisades drainages have a snowpack ranging from 75-100% of average. Most streams in the area started rising in early May and reached a peak around May 22. Streamflow runoff during May was around 150% of average for the Teton River and Snake River near Moran and around 125% of average for the Henrys Fork and Snake River at Heise. Combined reservoir storage for the eight major reservoirs in the basin is 88% of usable capacity, 109% of average. Palisades Reservoir was reported incorrectly last month; the correct reading should have been 653,000 acre-feet (48% of usable capacity). It is currently full. Irrigators and water users should have an adequate water supply this summer, whether using the water in the rivers or reservoirs.

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UPPER SNAKE RIVER BASIN

Reservoir Storage (1000AF) End of May, 1993

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Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
HENRYS LAKE	90.4	77.9	87.3	84.6
ISLAND PARK	135.2	136.6	131.7	134.4
GRASSY LAKE	15.2	15.2	15.2	13.6
JACKSON LAKE	847.0	541.7	829.9	540.5
PALISADES	1355.5	1355.8	700.6	993.9
RIRIE	96.5	87.0	53.1	83.9
BLACKFOOT	348.7	158.3	90.6	309.5
AMERICAN FALLS	1672.6	1623.5	911.6	1519.3

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UPPER SNAKE RIVER BASIN

Watershed Snowpack Analysis - June 1, 1993

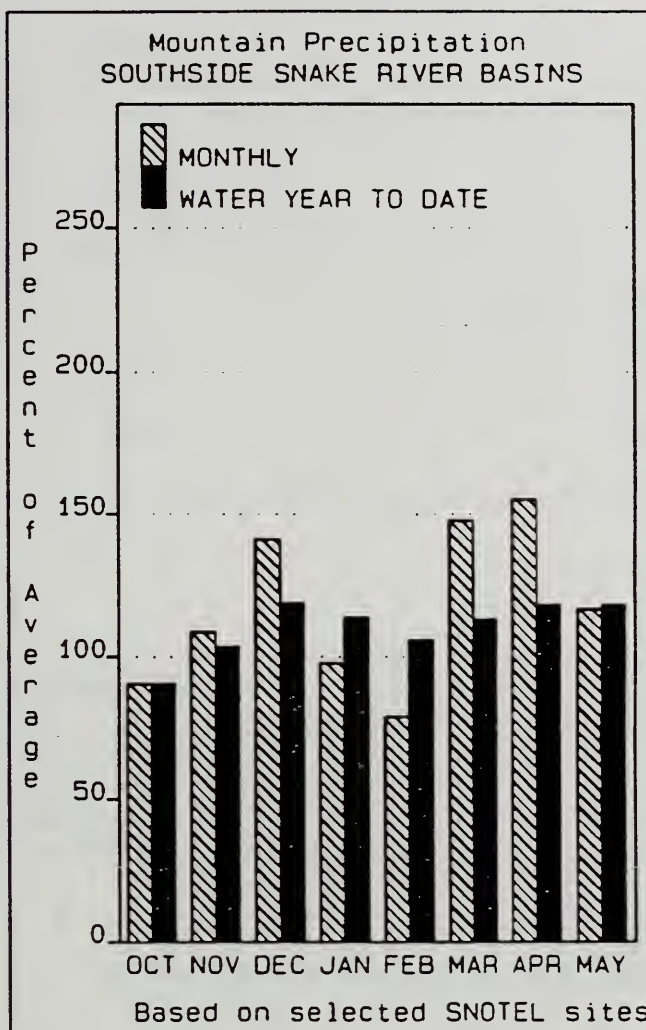
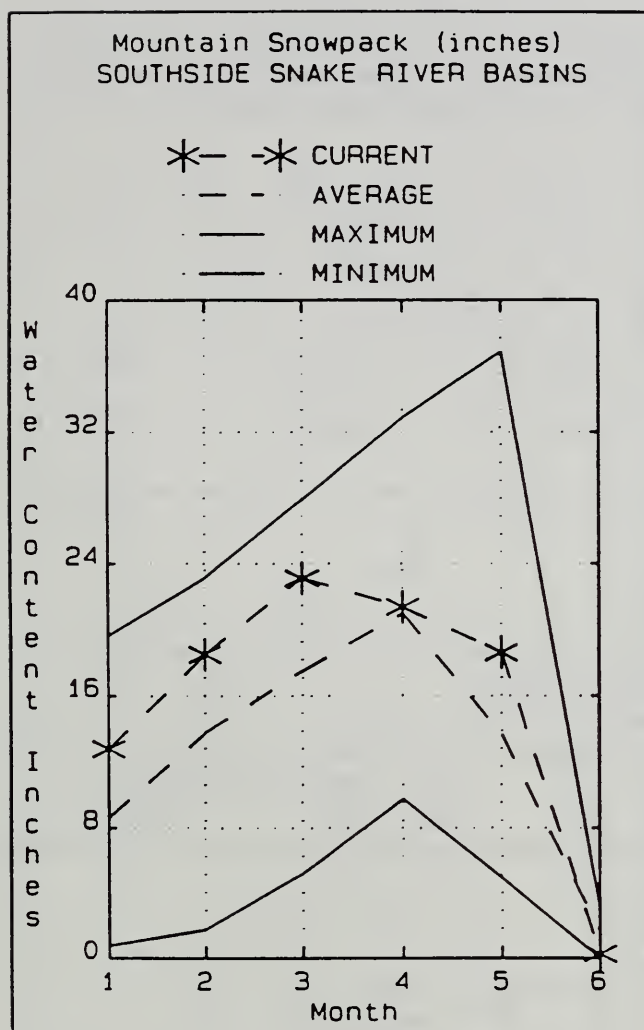
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Watershed	Number of Data Sites	This Year as Last Year	Percent of Average
Camas-Beaver Creeks	2	0	0
Henrys Fork River	7	0	98
Teton River	3	0	96
Snake above Jackson Lake	6	945	77
Gros Ventre River	2	0	72
Hoback River	5	0	79
Greys River	2	0	66
Salt River	2	0	0
Snake above Palisades	17	2298	75
Willow Creek	2	0	0
Blackfoot River	2	0	0
Portneuf River	2	0	0
Snake abv American Falls Res	22	2298	75

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SOUTHSIDE SNAKE RIVER BASINS

JUNE 1, 1993



WATER SUPPLY OUTLOOK

Above normal precipitation fell on the Southside Snake River basins during May, keeping the water year to date totals at 118% of average. Nearly all the snow has melted in these basins, except in the highest elevations, making the hillsides a colorful green. The Bruneau River had dual streamflow peaks this year, the first on March 17 dominated by rainfall and the second on May 16 from high elevation snowmelt. Streamflow volumes during May were 128% of average on the Bruneau River and near normal on the Owyhee River. Reservoir storage improved during the month, but still remains below 50% of usable capacity in Oakley and Salmon Falls reservoirs. Owyhee Reservoir continues to remain full, satisfying the needs of many irrigators and water users.

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SOUTHSIDE SNAKE RIVER BASINS
Reservoir Storage (1000AF) End of May, 1993

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Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
OAKLEY	77.4	29.3	8.6	42.7
SALMON FALLS	182.6	86.8	17.5	94.9
WILDHORSE RESERVOIR		NO REPORT		
OWYHEE	715.0	709.8	88.4	603.8
BROWNLEE	1419.3	1405.8	1378.1	1200.8

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SOUTHSIDE SNAKE RIVER BASINS
Watershed Snowpack Analysis - June 1, 1993

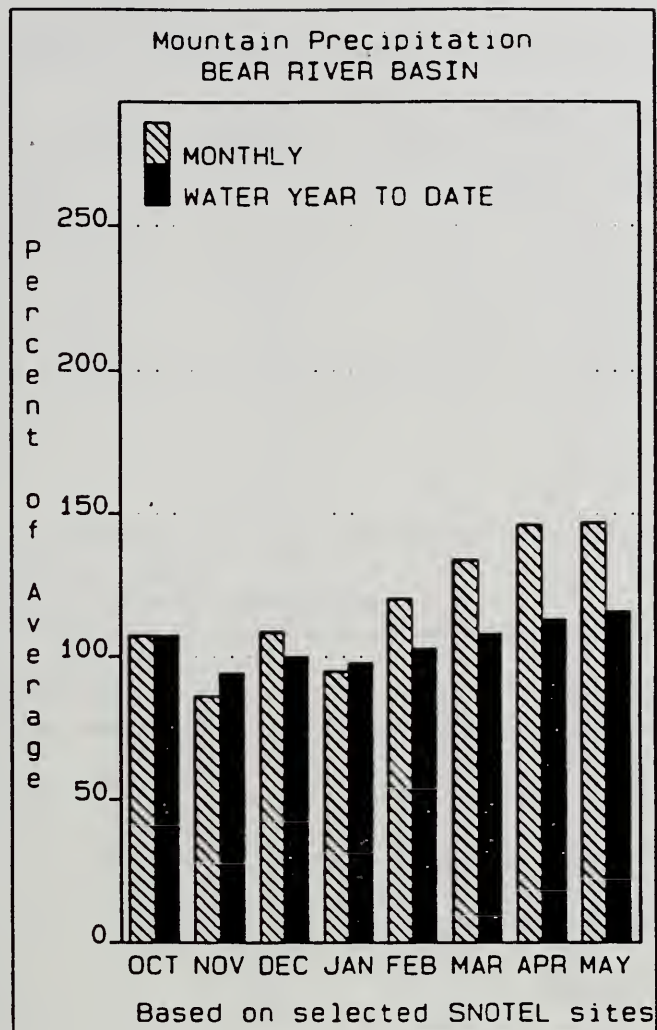
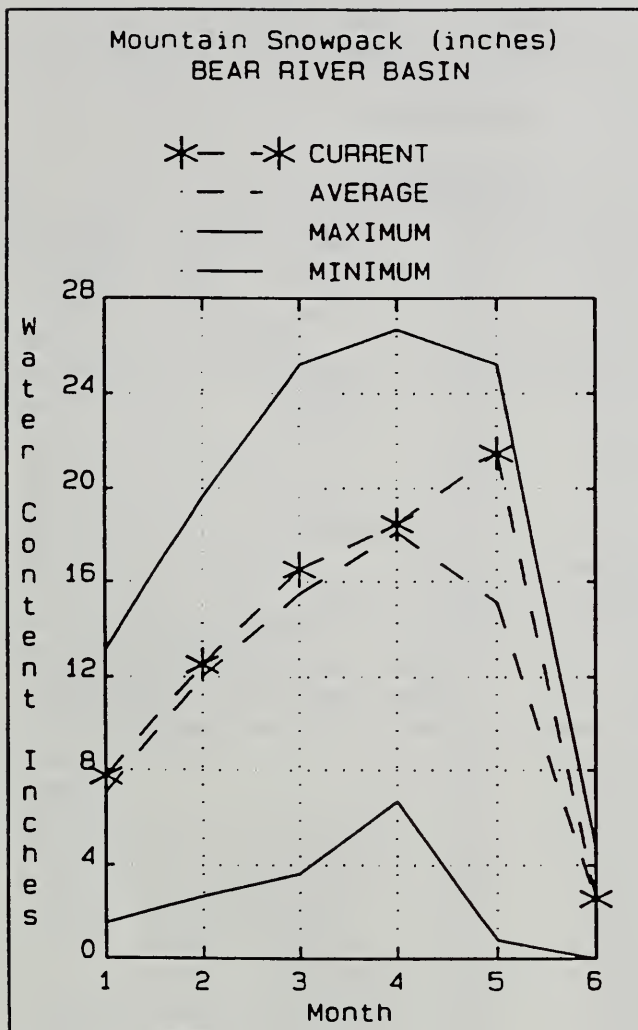
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Watershed	Number of Data Sites	This Year as Percent of Last Year	Percent of Average
Raft River	1	0	0
Goose-Trapper Creeks	1	0	0
Salmon Falls Creek	4	0	33
Bruneau River	5	0	33
Owyhee Basin Total	7	0	0

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BEAR RIVER BASIN

JUNE 1, 1993



WATER SUPPLY OUTLOOK

For the second consecutive month mountain precipitation in the Bear River basin was around 150% of average. The water year to date precipitation now stands at 116% of average. Warm temperatures and rain melted most of the snow in the basin; the remaining high elevation snowpack is around 90-100% of the June 1 average. As a result of the above normal precipitation and good snowpack, May streamflows filled Montpelier Reservoir and raised Bear Lake by 3.5 feet; however, Bear Lake is still only 30% of usable capacity. Because of the extremely wet spring and good natural river flow, irrigation demand is low and will allow Bear Lake to rise another 1-1.5 feet this season. Overall, the water supply this season should be adequate to meet most users needs.

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BEAR RIVER BASIN

Reservoir Storage (1000AF) End of May, 1993

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Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
WOODRUFF NARROWS		NO REPORT		
WOODRUFF CREEK		NO REPORT		
BEAR LAKE	1421.0	431.0	466.0	1145.5
MONTPELIER CREEK	4.0	4.0	1.6	3.3

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BEAR RIVER BASIN

Watershed Snowpack Analysis - June 1, 1993

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Watershed	Number of Data Sites	This Year as Percent of Last Year	Percent of Average
Smiths & Thomas Forks	3	0	79
Bear River ab WY-ID line	7	0	80
Montpelier Creek	1	0	0
Mink Creek	1	0	0
Cub River	1	0	147
Bear River ab ID-UT line	11	0	99
Malad River	1	0	0

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S N O W C O U R S E D A T A

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service
3244 Elder Street, Room 124
Boise, Idaho 83705
(208) 334-1614

JUNE 1993

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90

IDAHO AND ADJACENT STATES SNOW DATA LISTING						
ATLANTA SUMMIT (d)	7600	6/01/93	---	17.2E	.0	19.4
ATLANTA SUM PILLOW	7580	6/01/93	---	14.4	.0	16.4
BANNER SUMMIT PILLOW	7040	6/01/93	---	6.0	.0	8.2
BASE CAMP PILLOW	7030	6/01/93	---	.0	.0	.0
BEAGLE SPGS PILLOW	8850	6/01/93	---	.0	.0	.9
BEAR BASIN PILLOW	5350	6/01/93	---	.0	.0	.0
BEAR CANYON PILLOW	7900	6/01/93	---	.0	.0	2.3
BEAR CK SNOTEL	7800	6/01/93	---	.0	.0	7.2
BEAR MOUNTAIN PILLOW	5400	6/01/93	---	13.6	.0	40.7
BEAR SADDLE PILLOW	6180	6/01/93	---	.0	.0	.0
BIG BEND SNOTEL	6700	6/01/93	---	.0	.0	.0
BIG CREEK SUM PILLOW	6580	6/01/93	---	18.0	.0	16.5
BIG SANDY PILLOW	9080	6/01/93	---	.0	.0	.0
BLACK BEAR PILLOW	7950	6/01/93	---	29.2	.0	27.5
BLIND BULL PILLOW	8900	6/01/93	---	16.1	.0	13.4
BLUE RIDGE	6780	6/01/93	---	.0E	.0	--
BOGUS BASIN	6340	6/01/93	---	.0E	.0	3.3
BONE	6200	6/01/93	---	.0E	.0	--
BOSTETTER RS PILLOW	7500	6/01/93	---	.0	.0	.0
BRUNDAGE RESV PILLOW	4500	6/01/93	---	.0	.0	13.6
BUNCHGRASS MDWPILLOW	5000	6/01/93	---	.0	.0	15.4
CAMAS CREEK DIVIDE	5710	6/01/93	---	.0	--	--
CAMAS CK DIV PILLOW	5710	6/01/93	---	.0	--	--
COOL CREEK PILLOW	6280	6/01/93	---	18.9	18.5	38.1
COTTONWOOD CR PILLOW	7700	6/01/93	---	4.0	.0	.0
COULTER CREEK PILLOW	7020	6/01/93	---	.0	.0	.0
COZY COVE PILLOW	5380	6/01/93	---	.0	.0	.0
CRAB CREEK PILLOW	6860	6/01/93	---	.0	.0	.0
CRATER MEADOWS (d)	5960	6/01/93	---	15.1E	.0	28.7
CRATER MDWS PILLOW	5960	6/01/93	---	11.0	.0	26.3
DARKHORSE LK. PILLOW	8700	6/01/93	---	15.7	9.1	28.5
DEADWOOD SUM PILLOW	6860	6/01/93	---	21.1	.0	25.5
DOLLARHIDE SM PILLOW	8420	6/01/93	---	11.1	.0	14.3
EAST RIM PILLOW	7930	6/01/93	---	.0	.0	7.0
ELK BUTTE (OLD) (d)	5550	6/01/93	---	.0E	.0	8.4
ELK BUTTE PILLOW	5550	6/01/93	---	1.7	.0	14.1
ELKHART PARK PILLOW	9400	6/01/93	---	.2	.0	4.4
EMIGRANT SUM PILLOW	7390	6/01/93	---	7.8	.0	.0
FALL CREEK	6820	6/01/93	---	.0E	.0	--
FAWN CREEK SNOTEL	7050	6/01/93	---	.0	.0	.8
FISH LAKE AIRSTRIP	5650	6/01/93	---	13.4E	--	--
FRANKLIN BSN PILLOW	8170	6/01/93	---	10.3	.0	7.0
GALENA PILLOW	7440	6/01/93	---	1.9	.0	7.3
GALENA SUMMIT (d)	8780	6/01/93	---	3.9E	.0	12.0
GALENA SUMMIT PILLOW	8780	6/01/93	---	4.0	.0	10.7
GARFIELD R.S. PILLOW	6560	6/01/93	---	.0	.0	.0
GIVEOUT PILLOW	6840	6/01/93	---	.0	.0	.0
GRAHAM G.S. PILLOW	5690	6/01/93	---	.0	.0	.0
GRANITE CRK PILLOW	6770	6/01/93	---	.0	.0	.0
GRASSY LAKE	7270	6/01/93	---	7.8E	.0	12.4

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
GRASSY LAKE PILLOW	7270	6/01/93	---	9.9	.0	12.0	PRAIRIE PILLOW	4800	6/01/93	---	.0	.0	.0
GROS VENTRE PILLOW	8750	6/01/93	---	.0	.0	.0	QUARTZ PEAK PILLOW	4700	6/01/93	---	.0	.0	.0
HAMS FORK PILLOW	7840	6/01/93	---	.0	.0	.0	SADDLE MTN PILLOW	7900	6/01/93	---	2.8	.0	17.5
HAUKINS LAKE PILLOW	6450	6/01/93	---	.0	.0	19.5	SALT RIVER PILLOW	7600	6/01/93	---	.0	.0	.0
HAYDEN FORK SNOTEL	9100	6/01/93	---	.0	.0	.0	SAVAGE PASS (d)	6170	6/01/93	---	.0	--	--
HEMLOCK BUTTE (d)	5810	6/01/93	---	.6E	.0	27.0	SAVAGE PASS PILLOW	6170	6/01/93	---	.0	.0	12.5
HEMLOCK BUTTE PILLOW	5810	6/01/93	---	6.1	.0	29.9	SCHWEITZER BN PILLOW	6090	6/01/93	---	11.9	.0	34.3
HILTS CREEK PILLOW	8000	6/01/93	---	.0	.0	.0	SECESH SUMMIT PILLOW	6520	6/01/93	---	3.6	.0	16.6
HOODOO BASIN	6050	6/01/93	---	13.8E	14.0	32.9	SEDGWICK PEAK PILLOW	7850	6/01/93	---	.0	.0	.0
HOODOO BASIN PILLOW	6050	6/01/93	---	12.9	10.5	29.2	SEVENTYSIX CK SNOTEL	7100	6/01/93	---	.0	.0	.0
HOODOO CREEK	5900	6/01/93	---	10.8E	10.3	31.9	SHANGHAI SUM PILLOW	4570	6/01/93	---	.0	.0	.0
HOWELL CANYON PILLOW	7980	6/01/93	---	.0	.0	.0	SHEEP MTN PILLOW	6570	6/01/93	---	.0	.0	.0
HUMBOLDT GLCH PILLOW	4250	6/01/93	---	.0	.0	.0	SHERWIN PILLOW	3200	6/01/93	---	.0	.0	.0
HYNDMAN PILLOW	7440	6/01/93	---	.0	.0	.0	SLUG CK DVD PILLOW	7230	6/01/93	---	.0	.0	.0
INDIAN CREEK PILLOW	9430	6/01/93	---	13.8	.0	17.4	SLAKE RVR STA PIL	6920	6/01/93	---	.0	.0	.0
ISLAND PARK PILLOW	6290	6/01/93	---	.0	.0	.0	SNIDER BASIN PILLOW	8060	6/01/93	---	.0	.0	.0
JACK CREEK, U SNOTEL	7280	6/01/93	---	.0	.0	1.6	SOLDIER R.S. PILLOW	4330	6/01/93	---	.0	.0	.0
JACKSON PEAK PILLOW	7070	6/01/93	---	9.3	.0	11.1	SOMSEN RANCH PILLOW	6800	6/01/93	---	.0	.0	.0
KELLEY R.S. PILLOW	8180	6/01/93	---	.0	.0	.0	SOUTH MTN PILLOW	6500	6/01/93	---	.0	.0	.0
KENDALL R.S. PILLOW	7740	6/01/93	---	.0	.0	.0	SPRING CRK. PILLOW	9000	6/01/93	---	5.2	.0	19.0
LAKE FORK	5290	6/01/93	---	.0	.0	.3	SQUAW FLAT PILLOW	6240	6/01/93	---	.0	.0	.0
LAKEVIEW RDG. PILLOW	7400	6/01/93	0	.0	.0	.0	SQUAW MEADOW	5900	5/29/93	19	9.8	.0	9.6
LAUREL DRAW SNOTEL	6700	6/01/93	---	.0	.0	2.3	STATE LINE	6660	6/01/93	---	.0	.0	.5
LAVA CREEK	7350	6/01/93	0	.0	.0	--	STICKNEY MILL PILLOW	7430	6/01/93	---	.0	.0	.0
LEHMI RIDGE PILLOW	8100	6/01/93	---	.0	.0	2.8	SUNSET PILLOW	5540	6/01/93	---	4.9	.0	20.7
LEWIS LAKE DIVIDE	7850	6/01/93	---	16.8E	.0	--	SWEDE PEAK PILLOW	7640	6/01/93	---	.0	.0	.0
LEWIS LAKE PILLOW	7850	6/01/93	---	11.7	.0	19.8	TAYLOR CANYON SNOTEL	6200	6/01/93	---	.0	.0	.0
LILY LAKE SNOTEL	9050	6/01/93	---	.0	.0	1.0	THUMB DIVIDE PILLOW	7980	6/01/93	---	.0	.0	.0
LOLO PASS PILLOW	5240	6/01/93	---	.0	.0	.0	TOGWOTEE PASS (d)	9580	6/01/93	---	17.8E	.0	--
LOOKOUT (d)	5140	6/01/93	---	.0	--	10.9	TOGWOTEE PASS PILLOW	9580	6/01/93	---	16.9	.0	23.6
LOOKOUT PILLOW	5140	6/01/93	---	.0	.0	10.0	TOUCHET #2 PILLOW	5530	6/01/93	---	.0	.0	--
LOOMIS PARK PILLOW	8240	6/01/93	---	.0	.0	.0	TRIAL LAKE SNOTEL	9960	6/01/93	---	13.3	.0	12.0
LOST LAKE (d)	6110	6/01/93	---	20.2E	5.1	41.6	TRINITY MOUNTAIN (d)	7770	6/01/93	---	25.4E	.0	24.5
LOST LAKE PILLOW	6110	6/01/93	---	24.8	8.5	46.8	TRINITY MTN. PILLOW	7770	6/01/93	---	27.8	.0	29.9
LOST-WOOD DVD PILLOW	7900	6/01/93	---	1.6	.0	.0	TRIPLE PEAKS PILLOW	8500	6/01/93	---	4.3	.0	14.7
MADISON PLT PILLOW	7750	6/01/93	---	12.8	.0	7.5	TWELVEMILE PILLOW	5600	6/01/93	---	.0	.0	.6
MAGIC MTN PILLOW	6880	6/01/93	---	.0	.0	.0	TWIN LAKES PILLOW	6400	6/01/93	---	6.9	.0	25.8
MC RENOLDS RESERVOIR	6720	6/01/93	---	.0E	.0	--	TWO OCEAN PILLOW	9240	6/01/93	---	20.0	4.4	22.5
MEADOW LAKE PILLOW	9150	6/01/93	---	4.1	.0	10.8	VIENNA MINE PILLOW	8960	6/01/93	---	22.1	.0	27.2
MICA CREEK PILLOW	4750	6/01/93	---	.0	.0	--	WEST BRANCH PILLOW	5560	6/01/93	---	.0	.0	.0
MILL CREEK ST PILLOW	8800	6/01/93	---	6.2	.0	12.8	WHISKEY CREEK PILLOW	6800	6/01/93	---	.0	.0	1.2
MONTE CRISTO SNOTEL	8960	6/01/93	---	14.9	.0	9.8	WHITE ELEPHANT PILLO	7710	6/01/93	---	9.2	.0	6.2
MOONSHINE PILLOW	7440	6/01/93	---	.0	.0	.0	WILDHORSE DVD PILLOW	6490	6/01/93	---	.0	.0	.0
MOORES CREEK SUMMIT	6100	6/01/93	4	2.1	.0	10.6	WILSON CREEK PILLOW	7120	6/01/93	---	.0	.0	.0
MOORES CK SUM PILLOW	6100	6/01/93	---	.0	.0	10.7							
MOOSE CREEK PILLOW	6200	6/01/93	---	.0	.0	.0							
MORGAN CREEK PILLOW	7600	6/01/93	---	.0	.0	.0							
MOSQUITO RDG PILLOW	5200	6/01/93	---	.0	.0	16.0							
MOUNTAIN MDWS PILLOW	6360	6/01/93	---	.0	.0	18.4							
MUD CREEK	7100	6/01/93	---	.0E	.0	--							
MUD FLAT PILLOW	5730	6/01/93	---	.0	.0	.0							
NEW FORK PILLOW	8340	6/01/93	---	.0	.0	.0							
NEZ PERCE CMP PILLOW	5650	6/01/93	---	.0	.0	.2							
OXFORD SPRING PILLOW	6740	6/01/93	---	.0	.0	.0							
PHILLIPS BENCH PILL.	8200	6/01/93	---	17.3	.0	17.6							
PINE CK PASS PILLOW	6720	6/01/93	---	.0	.0	.0							
POLE CREEK RS SNOTEL	8330	6/01/93	---	2.4	.0	.0							

NOTE: Credit to USDA-Soil Conservation Service and cooperators will be appreciated in any published use of these data.

Depth and water content reported in inches.

E - Estimated

AM - Aerial Marker

(d) - Discontinued site

"Programs and assistance of the United States Department of Agriculture are available without regard to race, creed, color, sex, age, or national origin."

IDAHO MOUNTAIN SNOWPACK

JUNE 1, 1993

0 25 50 75 100 MI

LEGEND



Much Above Average
more than 130 percent



Above Average
110-130 percent



Near Average
90-110 percent



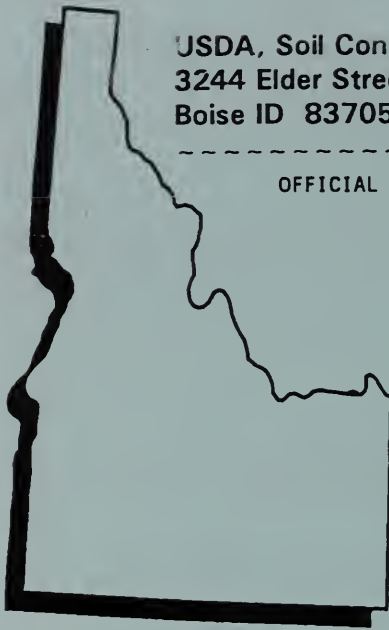
Below Average
70-90 percent



Much Below Average
less than 70 percent

Figures equal percent of
average for drainage.

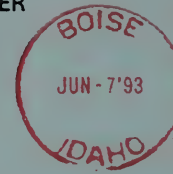




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SOIL CONSERVATION SERVICE

In addition to basin outlook reports, a Water Supply Forecast for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209-3489.